



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 814,054	03 22 2001	Alfred B. Levine	01-003	2529

7890 04 09 2003

ALFRED B. LEVINE
P.O. BOX 34-1738
BETHESDA, MD 20827

EXAMINER

PAIK, STEVE S

ART UNIT	PAPER NUMBER
----------	--------------

2876

DATE MAILED: 04 09 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/814,054

Applicant(s)

LEVINE, ALFRED B.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 27 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 51-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 51-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed on January 27, 2003.

Claim Objections

2. Claims 51, 53, 55-59, and 62-68 are objected to because of the following informalities:

Re claim 51: Please delete the second comma in line 8 on page 2.

The words "said digital detecting means" in line 11 lack the antecedent basis. The examiner respectfully suggests amending them by --said detecting means --.

The word "being" is repeated in line 16 and superfluous.

The word "theyt" in line 17 is misspelled. The examiner suggests substituting it with --said two markings --.

Re claim 53: Please insert a space between the words "phaseof" in line 2 and delete a space before a comma in line 5.

Re claim 55: The word "dis[alced" in line 6 on page 4 appears to be -- discrete --.

The letter "o" in line needs to be deleted.

The word "vehucle" in line 17 is misspelled.

Re claim 56: The dependency is incorrect. It appears to be a dependent claim of claim 55. A correction is required if that's what applicant intends to claim.

Please delete extra spaces in front of commas on page 5 of the Amendment.

The word, "descrete" in line 3 on page 5 appears to be -- discrete--.

Re claim 57: The word "pproaches" is misspelled. It appears that the applicant meant to

Art Unit: 2876

recite -- approaches --.

Re claim 58: The word "chooses" appears to be -- choose --.

Please delete extra spaces in front of commas on pages 6 and 7 of the Amendment.

"te" in line 1 of page 7 needs to be deleted.

Re claim 59: The word, "Said" needs to be written in lower case -- said --.

Please delete extra spaces in front of commas on page 7 of the Amendment.

Re claim 62: Please delete the extra spaces between the words, "continually" and "advising" on page 8.

Please insert a space between "and the" in line 3 of page 9.

Replace the comma at the end of the claim with a period.

Re claim 63: Please delete extra spaces in front of commas on page 10 of the Amendment.

The word, "descrete" in line 7 on page 10 appears to be -- discrete--.

Re claim 64: The word, "descrete" in line 4 on page 11 appears to be -- discrete--.

Re claim 65: Please insert a space between the words "uncluttercommunications".

Please delete a comma in front of the word, "said" in line 5 on page 11.

Please replace the word "twithout" with --without-- in line 6 on page 11.

Please insert a space between the words "ofvehicle" in line 6 on page 11.

The word, "descrete" in lines 3 and 7 on page 11 appears to be -- discrete--.

Re claim 66: Please delete extra space in front of comma in line 5 on page 12.

Art Unit: 2876

Re claim 67: Please delete extra spaces in front of commas on page 13.

The word, "descrete" in line 16 on page 13 appears to be -- discrete--.

Re claim 68: Please delete extra spaces between the words "a" and "map-free" on page 14.

Please delete extra spaces in front of commas and a period on page 14 of the Amendment.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 51, 52, 55-65, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano (US 5,587,911) in view of Ohmura et al. (US 6,208,932).

Regarding claims 51, 52, 55-65, 67 and 68, Asano discloses a navigation system for guiding a driver operated vehicle between two selected destinations. The system allows the driver to select an optimum path via a route change option shown in Fig. 7a. The route change key 64 is an input device which is for changing the entire route indicated, namely for commanding a re-search based on the driver's preference. The route information key 65 gives an option to a user to select route information of his/her preferences. The display can present a map with changeable scales and the names of roads on the course in a map-free format. The system

Art Unit: 2876

comprises in a first phase, operating means for continuous visual guiding of a vehicle from a zone area of its present location (present position mark in Fig. 4) to a zone area (destination mark) of a selected destination, the operating means visually displaying (map-free route in Fig. 4 and 5) representations of the two zone areas, with the displacement between the two zone areas being representative of the distance between the two zone areas for the vehicle to follow to reach the selected destination,

detecting means (present position detector, col. 5, ll. 45-48) within the vehicle for continually detecting the present location of the vehicle within different distant zones of a city, town, or other geographic area with reference to the end zone (destination in Fig. 4) of selected specific distant destination as the vehicle proceeds toward the end zone of the destination. The system further comprises visual display means energized by the detector means to continually display (present position 70 in Fig. 7b) only the changeable zone location of the vehicle and display the fixed end zone location of the specific destination, and localized navigation means (peripheral map) energizing the visual display (Fig. 7c and 12) when the vehicle reaches the fixed end destination zone, to display the streets, roads and local addresses in the end destination zone to guide the vehicle to the specific destination (Fig. 7b shows present position and the branching point with local addresses).

Although Asano discloses all the features of the claimed invention including a display means (visual/audible) to assist a driver as minimally distracted as possible, he does not explicitly disclose display is applied on the window which can be observed continually.

Ohmura et al. discloses in figure 1, a head-up display on a windshield outputting an image data related to a driver's driving condition and destination. This is an alternative way of

Art Unit: 2876

outputting necessary information to the driver based on the driver's preference. If the driver just wants to get information in an audible fashion, he or she may disregard the visual display on a windshield. This feature undoubtedly allows the driver to pay his/her full attention on the road conditions and promotes safe driving of the vehicle.

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have utilized the head-up display, as taught by Ohmura, for the purpose of providing an additional option of receiving information from a navigation system since it is an obvious matter of design variation, well within the ordinary skill in the art, to optimize available techniques of outputting information to a driver using a navigation system. Moreover, such modification could have been an art recognized functional equivalent in providing an output to a driver using a navigation system, per se.

5. Claims 53, 54 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano et al. (USP 5,587,911) as modified by Ohmura et al. (US 6,208,932) as applied to claims 51, 52 and 63 above, and further in view of Kubon (US 5,682,030).

Re claims 53, 54 and 66, the teachings of Asano in view of Ohmura et al. have been discussed above. Asano in view of Ohmura discloses a navigation system including all of the features of claimed invention with the exception of a plurality of fixed road signs bearing coded information and detecting said coded information.

Kubon shows an automobile navigations system (including a code reader camera 1601) and a road sign (1612) bearing a bar code (1613). The particular bar code may be chosen to correspond to the information printed on the road sign (1612), such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information

Art Unit: 2876

etc (these may be considered as traffic control information). In another situation, the user may, based on prior information concerning the trip route, set the system (navigation system) with the user's desired route. If the system decodes a bar code (1613) from a passing road sign (1612), which should not have been encountered, based upon the preset route, the system may notify the user that the user is no longer on the course. Alternatively, based upon the bar codes (1613) decoded from the road signs (1612), the system may give periodic indications to the user as to upcoming exits, turns, etc. (col. 20, ll. 55-62). The bar coded road signs provide exact present location information to the user and check if the user stays on the course. Furthermore, since the bar code may include other useful information such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information to a user, the user can plan his trip with increased efficiency.

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have combined the automobile navigation system reading a plurality of bar coded road signs, as taught by Kubon with the navigation system of Asano in view of Ohmura for the purpose of providing additional helpful information such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information and ensuring the users' staying on the predetermined trip route. Such combination provides a user a peace of mind while traveling and assists the user managing time and resources for his trip more efficiently.

Response to Arguments

6. Applicant's arguments with respect to claims 81-68 have been fully considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2876

The applicant cancelled all the previous pending claims and added new claims 51-68.

The cited prior art references read on the newly added claims as discussed above.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (7:00am-3:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Art Unit: 2876

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

Steven S. Paik

Steven S. Paik
Examiner
Art Unit 2876

ssp
April 2, 2003



MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800